CONTENTS

Volume 65 Number 1 1981

M. J. Smale, P. R. Buchan
Biology of *Octopus vulgaris* Off the East Coast of South Africa 1

E. A. Laws, J. W. Archie
Appropriate Use of Regression Analysis in Marine Biology 13

B. J. Davis, E. E. DeMartini, K. McGee
Gene Flow Among Populations of a Teleost (Painted Greenling, *Oxylebius pictus*) from Puget Sound to Southern California 17

D. K. Hofmann, B. P. Kremer
Carbon Metabolism and Strobilation in *Cassiopea andromedea* (Cnidaria: Scyphozoa): Significance of Endosymbiotic Dinoflagellates 25

N. G. Carmichael, B. A. Fowler
Cadmium Accumulation and Toxicity in the Kidney of the Bay Scallop *Argopecten irradians* 35

A. R. Flegal, M. Stephenson, M. Martin, J. H. Martin
Elevated Concentrations of Mercury in Mussels (*Mytilus californianus*) Associated with Pinniped Colonies 45

K. M. Johnson, C. M. Burney, J. McN. Sieburth
Enigmatic Marine Ecosystem Metabolism Measured by Direct Diel ΣCO_2 and O_2 Flux in Conjunction with DOC Release and Uptake 49

J. D. Miller, N. J. Whitney
Fungi of the Bay of Fundy. III. Geofungi in the Marine Environment 61

P. G. Falkowski, C. D. Wirick
A Simulation Model of the Effects of Vertical Mixing on Primary Productivity 69

M. R. Landry
Switching Between Herbivory and Carnivory by the Planktonic Marine Copepod *Calanus pacificus* 77

J. E. Purcell
Dietary Composition and Diel Feeding Patterns of Epipelagic Siphonophores 83

T. D. Sabourin, W. B. Stickle
Effects of Salinity on Respiration and Nitrogen Excretion in Two Species of Echinoderms 91

K. G. Sellner
Primary Productivity and the Flux of Dissolved Organic Matter in Several Marine Environments 101

Volume 65 Number 2 1981

G. Gäde, G. Meinardus
Anaerobic Metabolism of the Common Cockle *Cardium edule*. V. Changes in the Level of Metabolites in the Foot During Aerobic Recovery After Anoxia 113

S. Crespo, E. Soriano, C. Sampera, J. Balasch
Zinc and Copper Distribution in Excretory Organs of the Dogfish *Scyliorhinus canicula* and Chloride Cell Response Following Treatment with Zinc Sulphate 117

J. J. Karanas, R. C. Worrest, H. Van Dyke
Impact of UV-B Radiation on the Fecundity of the Copepod *Acartia clausii* 125

B. H. Robison, T. G. Bailey
Sinking Rates and Dissolution of Midwater Fish Fecal Matter 135

M. Sibuet, J. M. Lawrence
Organic Content and Biomass of Abyssal Holothuroids (Echinodermata) from the Bay of Biscay 143

B. A. Byers, J. B. Mitton
Habitat Choice in the Intertidal Snail *Tegula funebralis* 149

R. M. Woollacott
Association of Bacteria with Bryozoan Larvae 155

C. Barker Jørgensen
Feeding and Cleaning Mechanisms in the Suspension Feeding Bivalve *Mytilus edulis* 159

R. D. Cherry, M. Heyraud
Polonium-210 Content of Marine Shrimp: Variation with Biological and Environmental Factors 165

A. D. Ansell, P. R. O. Barnett, A. Bodoy, H. Massé
Upper Temperature Tolerances of Some European Molluscs. III. *Cardium glaucum, C. tuberculatum* and *C. edule* 177

W. R. Boynton, W. M. Kemp, C. G. Osborne, K. R. Kaumeyer, M. C. Jenkins
Influence of Water Circulation Rate on *in situ* Measurements of Benthic Community Respiration 185

A. L. Smith
Comparison of Macrofaunal Invertebrates in Sand Dollar (*Dendraster excentricus*) Beds and in Adjacent Areas Free of Sand Dollars 191

J. Iglesias
Spatial and Temporal Changes in the Demersal Fish Community of the Ria de Arosa (NW Spain) 199

D. C. Hockin
Maintenance of a Diverse Harpacticoid Copepod Community in Microcosm Culture 209

(Continued on text page)

Volume 65 Number 3 1981

J. E. Burris
Effects of Oxygen and Inorganic Carbon Concentrations on the Photosynthetic Quotients of Marine Algae 215

M. M. Harlin, B. Thorne-Miller
Nutrient Enrichment of Seagrass Beds in a Rhode Island Coastal Lagoon 221

L. A. Crocker, H. M. Reiswig
Host Specificity in Sponge-Encrusting Zoanthidea (Anthozoa: Zoantharia) of Barbados, West Indies 231

P. W. Lehman
Comparison of Chlorophyll *a* and Carotenoid Pigments as Predictors of Phytoplankton Biomass 237

D. McB. Williams, P. F. Sale
Spatial and Temporal Patterns of Recruitment of Juvenile Coral Reef Fishes to Coral Habitats Within "One Tree Lagoon", Great Barrier Reef 245

A. W. White
Sensitivity of Marine Fishes to Toxins from the Red-Tide Dinoflagellate *Gonyaulax excavata* and Implications for Fish Kills 255

J. A. Reidenauer, D. Thistle
Response of a Soft-Bottom Harpacticoid Community to Stingray (*Dasyatis sabina*) Disturbance 261

S. J. Dollar, R. W. Grigg
Impact of a Kaolin Clay Spill on a Coral Reef in Hawaii 269

G. W. Tribble
Reef-Based Herbivores and the Distribution of Two Seagrasses (*Syringodium filiforme* and *Thalassia testudinum*) in the San Blas Islands (Western Caribbean) 277

J. S. Weis, P. Weis, M. Heber, S. Vaidya
Methylmercury Tolerance of Killifish (*Fundulus heteroclitus*) Embryos from a Polluted *vs* Non-Polluted Environment 283

C. M. Burney, P. G. Davis, K. M. Johnson, J. McN. Sieburth
Dependence of Dissolved Carbohydrate Concentrations upon Small Scale Nanoplankton and Bacterioplankton Distributions in the Western Sargasso Sea 289

R. Gaudy, L. Sloane
Effect of Salinity on Oxygen Consumption in Postlarvae of the Penaeid Shrimps *Penaeus monodon* and *P. stylirostris* Without and With Acclimation 297

M. R. Roman, P. A. Rublee
A Method to Determine *in situ* Zooplankton Grazing Rates on Natural Particle Assemblages 303

Indexed in Current Contents